

50X1-HUM

Page Denied

Next 3 Page(s) In Document Denied

Page 4 of 7 Pages

50X1-HUM

The Need to Increase the Rate of Conducting Reconnaissance

by

General-Mayor A. Kuzichev

Colonel I. Donskoy

Experience from command-staff and troop exercises, in our opinion, shows that the rate of conducting reconnaissance does not correspond to modern means of armed combat and the capabilities of these means. The reasons for this are:

- a significant time gap between the detection and destruction of nuclear targets and other important enemy targets;
- a great expenditure of time for orientation, topographic tie-in, and determination of the precise coordinates of reconnoitered targets during the day and especially at night and under conditions of limited visibility;
- poor cross-country capability of organic technical means of radio, radar, and radiotechnical reconnaissance and of other reconnaissance means off roads (on terrain of average ruggedness);
- the absence, within troops of an army and in large units, of organic means for aerial observation of the battlefield and for the transfer of reconnaissance elements to the enemy rear across extensive zones of contamination and areas of destruction and also for maneuvering reconnaissance in wide zones of advance;
- inadequate equipping of reconnaissance units and subunits with fire and sabotage means. Their supplementary reinforcement with tanks makes them more cumbersome and does not solve the problems of securely approaching a target and attacking it by surprise;
- the limited range of radio communications and the complicated system of secure control of reconnaissance elements which leads to their forced holding within intermediate areas (lines) and to a significant expenditure of time on encoding and decoding radio messages.

It appears to us that methods of increasing the rate of conducting reconnaissance in the battle and the operation must be sought mainly in the direction of eliminating the indicated shortcomings. In order to accomplish this, the following are first necessary.

50X1-HUM

First, to allocate the tasks for the reconnaissance of enemy means of mass destruction and other important enemy targets among the personnel who



Page 5 of 7 Pages

are executing the tasks, in accordance with the importance of the targets, with their distance from the forward edge, and with the time of their readiness to open fire.

As an example, we may take the possible allocation of tasks for reconnaissance of low-yield nuclear means: 155-mm and 203.2-mm howitzers and Davy Crockett recoilless guns. These means comprise up to ninety percent of the total number of nuclear guns and launchers of a reinforced army corps. They are all at a distance of 0.5 to six to eight kilometers from the forward edge. They can fire in no more than three to seven minutes after occupying their siting areas. In our opinion, combat against these nuclear means (detecting and destroying them) must be made the responsibility mainly of motorized rifle, tank, artillery, mortar, and other subunits of the ground forces participating in the battle. However, the main efforts of reconnaissance means of the army and the large units should be concentrated on the timely detection of the bases, depots, and supply points of enemy nuclear weapons, the airfields of their delivery aircraft, and the waiting areas and siting areas of operational-tactical missiles.

Reconnaissance elements must be capable not only of detecting enemy nuclear targets but also of putting them out of action. It is obvious that for this purpose we should not follow the course of increasing the number of combat vehicles in their composition but should for the most part equip all reconnaissance vehicles with combat means which are of small size but effective: antitank guided missiles and recoilless guns, and in the future nuclear weapons as well.

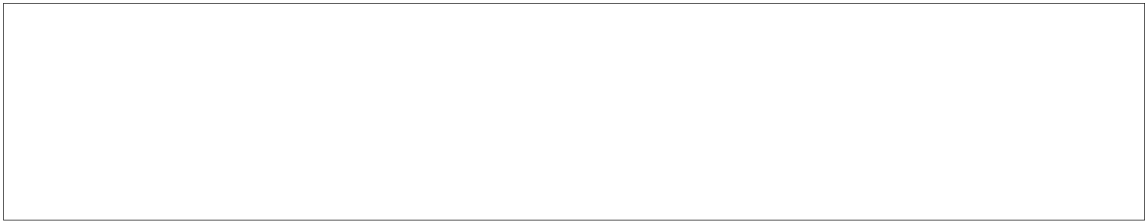
Second, we consider it impossible at the present time to speak seriously of increasing the effectiveness and rate of conducting reconnaissance unless we equip operational formations (the army) and large units with aerial reconnaissance means which have the necessary equipment for daytime and nighttime photography and for infrared, radiotechnical, and television observation.

The availability of aerial reconnaissance subunits in the army and divisions ensures not only reinforcing the operating reconnaissance groups but also airlifting them across wide zones of contamination and destruction and into the enemy rear.

50X1-HUM

A reconnaissance group reinforced, for example, with a helicopter can quickly perform an initial terrain survey in the zone where reconnaissance is to be conducted, which ensures timely detection of the enemy, rules out





Page 6 of 7 Pages
50X1-HUM

surprise encounters with him, and promotes a sharp increase in the rate of conducting reconnaissance.

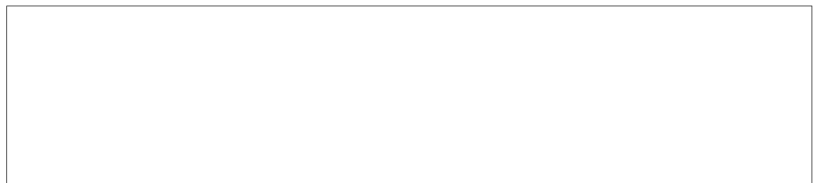
Third, the system being used to predict the radiation and chemical situation exerts a substantial influence on increasing the rate of reconnaissance. Many commanders and staffs today, using the computation-graphic method of assessing the radiation situation, proceed on the assumption that the location of the burst and its parameters -- altitude and yield -- have already been established by someone and that it remains only to apply certain tables. Among the troops, unfortunately, the necessary methods still do not exist for determining the coordinates of enemy nuclear bursts, and it has not been determined what means can be employed for this purpose. The need has clearly become urgent for us to check our capabilities for determining the coordinates of enemy nuclear bursts, by means of experimental exercises, and to work out a single methodology for the troops to follow.

Fourth, in order to sharply reduce the time for orientation, topographic tie-in, and determination of the precise coordinates of detected targets, without entering the zone of ground covering forces (two to four kilometers), it is necessary to have topographic tie-in equipment and DSP-30 portable engineer range finders in command reconnaissance vehicles. Technical reconnaissance means must ensure the efficient location of targets by intersection while the vehicles are in motion or with stops of minimum duration. In this regard, it is necessary that the radio direction-finders in the ultra-shortwave band which are currently in service, and the radars for artillery reconnaissance as well, be replaced with more mobile designs.

Fifth, along with seeking out ways for more effective exploitation of existing reconnaissance equipment, the need has arisen as well to develop qualitatively new reconnaissance equipment which works on the principle of detecting targets by the radioactive, electromagnetic, and thermal radiation they emit. In this connection, troops should not be equipped with reconnaissance equipment which already fails to meet the requirements of present-day combat.

50X1-HUM

We shall take as an example a reconnaissance device, the IR-1 radar illumination detector, which was issued to reconnaissance units. In concept, this is an indispensable device. It answers the question of whether, at any given moment, a column, a single vehicle, or other targets belonging to our troops are within the field of enemy radar illumination and whether the march route is under observation by enemy radars. However, the value of



Page 7 of 7 Pages
50X1-HUM

this device is reduced sharply because the acoustic indicator and the compass needle do not work in a vehicle with the engine running (underway). In order for the device to operate, it is absolutely necessary to walk with it, on foot, away from moving motor vehicles. This certainly does not contribute to increasing the rate of conducting reconnaissance.

Sixth, reconnaissance elements must be equipped more quickly with improved communications equipment ensuring stable, pretuned secure communications with them to the full depth of the combat task of the formation and large unit.

The main means of conveyance for reconnaissance groups must be amphibious armored combat vehicles with a cross-country capability, equipped with weapons and instruments, transportable by air, and hermetically sealed in order to keep radioactive dust and toxic fumes from entering the fighting compartment.

The personnel of reconnaissance units and subunits must have a high degree of special training, in many instances calling for knowledge of the enemy's language and the ability to make airborne and amphibious landings, to make parachute jumps, to drive motor vehicles and armored personnel carriers confidently, and to use radiation and chemical reconnaissance devices skilfully.

50X1-HUM

50X1-HUM